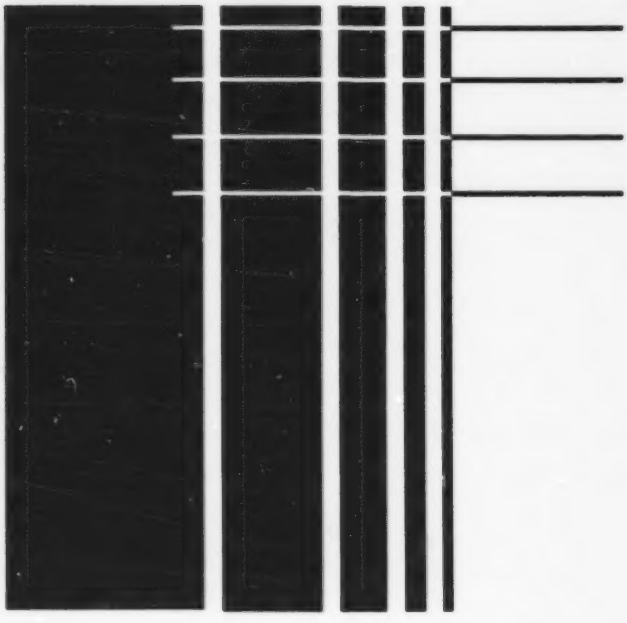
Colleges and the Educational Spectrum



Study Team 5 Final Report

VISION 2000

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Vision 2000 is a review of the mandate of Ontario's Colleges of Applied Arts and Technology. It is coordinated by the Ontario Council of Regents and was initiated by the Minister of Colleges and Universities in October of 1988.

A Steering Committee, with broad-based representation, was established to guide the Vision 2000 process. Consultation, with a wide variety of stakeholders, and research was handled by five study teams. Study Team 1's task was to provide an empirical snapshot of the current college system and its external environment. Study Team 2 examined the role of colleges in our changing economy, while Study Team 3 looked into ways that the college system could promote access and educational support for diverse learners. Study Team 4's purpose was to study the challenging interrelationships of quality, accessibility and efficiency. For Study Team 5 the research and consultation focussed on the linkages between colleges and other educational institutions.

The Final Report of Study Team 5 is the outcome of the deliberations of the members of Study Team 5, Chaired by Penny Moss. This Final Report does not necessarily represent the views of the Vision 2000 Steering Committee, the Ontario Council of Regents, or the Government of Ontario.

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Acknowledgments

The final report of Study Team 5 is the result of many hours of discussion and sometimes passionate debate. The issues before the Study Team were ones on which we often had decided and conflicting opinions, yet we were able to find a meeting of minds. Special appreciation is due to all members — people whose professional responsibilities are such that time for the extensive commitment required was not easily found.

We trust that the many people who prepared responses and submissions and who talked with us, find their concerns reflected in our work. To the researchers and writers, our thanks; to the staff of the Vision 2000 Secretariat, whose work was critical to the completion of the task, our sincere appreciation.

Penny Moss,
Chair, Study Team 5

Starr Olsen,
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Preface

The task assigned to Study Team 5 is a daunting one. To our knowledge, the relationships between schools and colleges and colleges and universities have not received systematic attention in the past. The formal education systems in this Province have their own unique histories, distinct governance structures, and generally understand their roles and responsibilities in relation to specific client groups. Study Team 5 has focussed on students themselves in all their diversity, and sought ways to provide greater opportunities for students to both enter and succeed in post-secondary programmes. At the same time, the Study Team has maintained the respect for the autonomy of educational institutions that is so highly valued in Ontario.

Our recommendations are neither radical proposals for reform or restructuring, nor do they encompass all of the issues identified by the Study Team, its researchers and respondents. Rather they seek to build upon the current momentum in the voluntary establishment of inter-institutional relationships.

Study Team 5 has not considered the significant policy issues related to transfer or mobility between colleges. In this regard, it will be important to consider the findings of Study Team 4 together with those of Study Team 5 in order to assess the 'completeness' of proposals to improve the effectiveness of Ontario's educational systems in meeting the personal and career aspirations of our citizens in an increasingly challenging economic environment.

This report represents the consensus developed by the members of Study Team 5, a consensus arrived at more easily in matters relating to the links between schools and colleges than those between colleges and universities.

The Study Team is conscious of the important role of the Steering Committee in formulating an overall set of recommendations to guide the further development of the college system. We believe that it is more important that the intent of Study Team 5's recommendations rather than their form be captured in the final report of Vision 2000.

Penny Moss
Chair, Study Team 5

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Introduction

The primary task for Study Team 5 was to examine the nature of the relationships between the three main institutional components of Ontario's educational spectrum — schools, colleges and universities — and suggest ways in which the links between these institutional components might be improved. Given the context of Vision 2000's review of the mandate of the Colleges of Applied Arts and Technology, the team has made an effort to focus on the challenges and solutions most relevant to the colleges.

The Study Team membership was composed of volunteers from the colleges, secondary schools and universities, the Ministry of Colleges and Universities, the Ministry of Education, and labour. The make up of the Study Team provided a solid base of expertise and constituency representation. Appendix 1 lists the members of Study Team 5.

In order to provide the necessary depth of analysis and policy advice, the task of the study team was divided into two parts: One group focussed on the relationship between schools and colleges, while the other examined university and college links. Each subcommittee commissioned background papers on key questions concerning the links between educational institutions, and sponsored consultations with major stakeholders. A list of all the background papers is contained in Appendix 2.

▲ Assumptions

The overall purpose of Study Team 5's investigation was to examine how links between the partners in education might achieve three results:

1) broader access to college programmes for all potential students;
2) greater success for all students enroled in college programmes; and
3) improved opportunities for more advanced training for college students.

In order to develop realistic options for consideration of the Steering Committee, Study Team 5 needed a base for its deliberations, a means to determine the validity of the suggestions to be put forward.

Certain generally accepted beliefs and premises emerged from the research and consultation. The Study Team incorporated these with the original goals set out when the colleges were established to arrive at a new series of basic assumptions. These assumptions have guided our Study Team in developing recommendations.

The following assumptions describe a system which should be built first and foremost upon learner needs. Committed to the support of lifelong learning, this system is open, flexible and future-focussed. Study Team members believe that most of these assumptions would be generally accepted as governing principles within the broader educational community.

- Publicly funded educational institutions serve the social, cultural, economic and democratic interests of the province, through a commitment to provide educational opportunities responsive to the needs and aspirations of all students.
- Students should have opportunities to participate in educational programmes at levels congruent with their needs, abilities and aspirations.
- Access encompasses both the opportunity to enrol and the opportunity to succeed.
- Clear expectations of the skills and qualities necessary for success should be set and communicated effectively.
- The anticipated outcomes of courses, programmes, and areas of study should be defined and provided to students and other stakeholders as a necessary component of student success.
- Prior education and experience should be evaluated in a non-arbitrary and systematic fashion for credit or standing in schools, colleges and universities.
- Ensuring student success is a primary responsibility of our educational institutions. Student development initiatives should be all-inclusive and a mandatory aspect of this responsibility.
- The educational needs of Ontario's citizens are likely to be met more effectively and efficiently through collaboration, rather than competition, in the provision of educational opportunities.
- Students' success in meeting their diverse educational goals is more likely when they experience an educational system that is 'transparent,' in which they can move easily and effectively between its different 'components' as part of a lifelong learning process.
- The quality of education of the college system should be determined by curricular consistency, and relevance tied to measurable educational outcomes.

- Attainment of desired outcomes should be a focus of institutional improvement and quality assurance.
- The college system must provide an integrated, cooperative, future-focussed human resource development plan that contributes to improvement in student development and success through the application of enhanced skills of faculty, administrative and support staff.

Links Between the Colleges and Schools

Process

This part of the report of Study Team 5 focuses on the links between schools and colleges. The subcommittee examining this aspect of the educational spectrum commissioned four background papers to answer the following questions:

- Do colleges maintain an open-door policy for all potential students as envisioned in the mandate?
- How can the colleges better ensure success for greater numbers of students in their choice of programmes?
- What links are possible that will promote ease of transition and mobility within the educational system to enhance each individual's chance of success?
- What measures are necessary to achieve a truly 'permeable' education system that will foster the concept of lifelong learning for all potential clients.

Dr. Jo Oppenheimer was engaged to research these questions. Her findings were published in the following papers:

The Roles, Mandates and Relationships of Schools and Colleges.

The Student: Past, Present and Future.

Access, Competence and Success.

Relationships and Responsibilities: Potential Links Between Schools and Colleges.

These four papers were subsequently consolidated into a single document entitled "The Relationship between Schools and Colleges."

In addition to the research papers, the Study Team solicited province-wide responses to the questionnaire entitled "An Invitation to Participate." It was designed to encourage comments from a broader educational community. Those groups asked to submit written responses included:

- school boards (Public, Separate and French Language);
- teacher federations;
- curriculum subject councils;
- selected reporting groups to the Committee of Presidents; and

- other key constituents.

The Study Team subcommittee received 58 responses to the questionnaire. An overview of the themes that emerged are examined in the background paper "Summary of Submissions Received in Response to 'An Invitation to Participate.'" The Study Team was impressed with the insight and valuable information submitted by individuals, high school personnel, and both small and large school boards.

The research and consultations combined to provide a firm foundation of both historical analysis and opinions and beliefs of a significant cross-section of stakeholders. Building from this base, the Study Team proceeded to identify and explore the major issues and challenges in order to establish criteria against which policy options/solutions might be analysed and tested. Finally, the Study Team developed a number of recommendations for the consideration of the Steering Committee.

The following section of this report begins with an overview of the issues and challenges facing the educational system. The next section, entitled "Setting the Stage," describes the mandate of the college sector, the mandate of secondary schools, and the changing environment. "Aspects of Success" delves into barriers to student access, followed by "Studies on Success," an exploration of the issues surrounding student success. The Study Team then examines the need for school-college links in the section entitled "School-College Links," and human resource development in the chapter that follows. Finally, the Study Team presents its recommendations in the last section.

Overview: Issues and Challenges

The major issues which emerged from the research, consultations and interviews concerned ***equality of access*** and the underlying need to provide comprehensive support for equality of access. From the discussions among Study Team members, the findings in the background papers and the contributions of stakeholders during consultations, the following clarifies what Study Team 5 means by 'equality of access':

- an education system that has removed barriers to the acquisition of knowledge and mobility between parts of the system;
- the opportunity to succeed in this system.

Many stakeholders affirmed the necessity of comprehensive support for this approach to accessibility, including a particular emphasis on human resource development strategies that will strengthen and increase our knowledge of how to help learners succeed. Without such strategies and programmes, a coordinated system for student success will not likely be successful even if there is a barrier-free system in place.

The Study Team found there was general agreement that the colleges face a dual challenge: offering services tailored to the needs of learners with increasingly varied backgrounds and abilities; and, making lifelong learning a reality.

Although a more detailed discussion of the barriers to access is provided in the body of the report, the following list is an overview of some of the barriers identified by Study Team 5.

- lack of flexibility in college programming and lack of multiple entry and re-entry options;
- geographic limitations hampering access;
- inefficient, incorrect or missing information concerning educational requirements for meeting entrance and exit standards;
- lack of easily accessible and consistent application procedures;
- lack of co-operation and collaboration between the various levels of education (high schools/colleges/universities);
- lack of a clear or consistent process for providing advanced standing, credit for experience or prior learning;
- lack of curriculum co-ordination and programmes aimed at ensuring successful transitions among educational institutions;

- lack of programmes that provide an integrated, wholistic approach to preparatory and remedial education;
- lack of flexibility in time-lines for learners to complete programmes;
- lack of training for college personnel and secondary teachers in developing and implementing programmes supporting student success strategies; and
- lack of research data upon which to evaluate the need for and effectiveness of programmes attempting to support student success.

Study Team 5 could not and was not mandated to respond to all of these challenges. Our concern was to understand how improvements in the links between schools and colleges could play an effective role in improving student access and success.

The recommendations of the Study Team are intended to begin the process of overcoming the compartmentalization of Ontario's education system. Suggestions are made for policies aimed at improving the ease and flexibility of assessment for prior learning, and developing a process for a more systematic and consistent coordination of curriculum. Recommendations are discussed which will facilitate the movement of students between secondary schools, colleges and universities. Proposals are made that encourage a more provincial scope to programmes and services that support student success. And recommendations are put forward for provincially coordinated efforts to train all college personnel to assist students in successfully realizing their educational goals.

Setting the Stage

The following outlines the mandates of Ontario's colleges and the secondary schools, and reviews research on the challenge of changing circumstances.

▲ The College Mandate

The college sector in Ontario was designed to fill the one gap perceived to be remaining between compulsory schooling and employment in an economy that required increased skills training and familiarity with the new technologies.[1]

The founding mandate of the colleges described institutions geared primarily towards secondary school graduates who did not plan to attend university. In addition, colleges would meet the educational needs of adults and out-of-school youth, whether or not they were secondary school graduates. However, the colleges would not grant degrees.[2]

Introducing the bill that established the college sector, William Davis, then Education Minister, elaborated that college programmes would be directly related to applied arts and technology — both full-time and part-time, day and evening — "to meet the relevant needs of all the adults within a community, at all socio-economic levels, of all kinds of interests and aptitudes, and, at all stages of educational achievement."[3]

In 1967, Davis added four principles to the original mandate. In "Some Unique Features of Colleges of Applied Arts and Technology," he indicated that the colleges were to embrace total education, vocational and avocational, and provide for complete horizontal and vertical mobility; colleges were to develop curricula that would meet the combined cultural aspirations and occupational needs of the student; and colleges were to operate in the closest possible cooperation with

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[1] Oppenheimer, "The Relationship Between Schools and Colleges," in Colleges and the Educational Spectrum. Colleges and Schools, (Toronto: Vision 2000, 1989), p. 5.

[2] Basic Documents, cited in "The Relationship Between Schools and Colleges," pp. 5-6.

[3] Ibid.

business and industry, and with social and other public agencies, including education.[4]

"Some Unique Features" also stated that colleges must be dedicated to progress through constant research in the realms of curriculum and delivery. Another aspect of the college mandate referred to the establishment of a curriculum committee for each college, with one representative from the college, the secondary schools and nearest university, to consider possibilities for programme integration. This committee was to be chaired by a representative from the business/industrial sector or some public agency.[5] There has been no action on these two latter points. (It should be noted that both Study Team 2 and Study Team 4 have recommendations concerning research and the establishment of curriculum committees that would assist in completing the original mandate.)

▲ The Mandate of the Secondary Schools

The secondary school mandate was revised in 1984. According to the Ministry of Education's 1984 policy document, Ontario Schools: Intermediate and Senior Divisions (OS:IS), the overall purpose of secondary education is to "help each student develop his/her potential as an individual and as a contributing member of society who will think clearly, feel deeply, and act wisely." The role of the secondary system is "primarily directed to preparing young adolescents both to develop the independence they need to act as concerned and compassionate citizens and to continue on to post-secondary studies wherever they have an interest and a capability to do so." The 13 goals of education outlined in OS:IS are, in a general way, the skills, knowledge and attitudes that young people are expected to acquire.[6]

OS:IS specifies three levels of course difficulty: basic, general and advanced. Basic level courses are intended primarily for students who may not undertake post-secondary studies, but will move directly into the workforce. Both general and advanced levels of difficulty are to serve as appropriate preparation for entry into certain programmes at the colleges of applied arts and technology. Advanced level

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[4] Cited in "The Relationship Between Schools and Colleges," p.6

[5] "Some Unique Features", pp. 33-34, cited in "The Relationship Between Schools and Colleges," p.7

[6] OS:IS, pp. 2-4, cited in "The Relationship Between Schools and Colleges," p..2-3

courses would also lead to university entry.[7] Linkage programmes between the schools and colleges are mentioned as a means of avoiding course overlap and to facilitate advanced placement.[8]

Secondary schools are responsible for "fundamental and general development and preparation: development of the intellectual, physical, social, cultural, emotional, and moral aspects of each individual and preparation of each student for either the world of work or post-secondary education."[9]

▲ A Changing Environment

Historically, Ontario's education system has been compartmentalized. Students were allocated to different levels and relatively autonomous sectors of the system, primarily according to age, ability, interest, and educational and employment objectives. In spite of some areas of confusion, such as the responsibility for adult education, the boundaries of the different parts of the system have, on the whole, reflected the external influences at work in the economy and within the larger society. However, common to all parts of the system is the concept of equity espoused by the province: equality of educational opportunity for all.

"In general," says Oppenheimer, "the mandates of both the secondary schools and the colleges appear to have been realized although there is room for improvement in both systems." There is, however, a growing belief that an interpretation of the college mandate sufficient for the 1960s is no longer adequate to meet the changing circumstances and needs of 1990 and beyond.

The colleges currently serve two major client groups: students taking the traditional route from secondary school to post-secondary education; and increasing numbers of adult workers who require retraining or upgrading. The secondary school complement of students is shrinking as other groups begin to move into the college contingent. Increased demands for access can be anticipated from specific groups that include the following: illiterate Ontarians; women in non-traditional fields; underprepared secondary school graduates who require remediation or upgrading;

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[7] OS:IS, p.16, cited in The Relationship Between Schools and Colleges," p.3

[8] OS:IS, p.28, cited in "The Relationship Between Schools and Colleges," p.7

[9] "The Relationship Between Schools and Colleges," p.3

increasing numbers of new Canadians; people with physical or learning disabilities; native students; unemployed youth who have not been successful in the secondary system; and, as the population ages, growing numbers of senior citizens. These clients will come from all parts of the province, originating from a broad range of ethnocultural backgrounds. They will likely have a wide assortment of aptitudes and career aspirations, and an increasing percentage will need educational services provided on a part-time basis.[10]

The challenges now before the colleges result largely from a breakdown in the compartmentalization of the external environment. The old boundaries no longer hold true. This review takes place in the context of an evolving social, cultural and industrial environment that has altered both the face and the needs of the clients of the education system.

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[10] Response to "Invitation to Participate"

Aspects of Access

Approaching the topic according to students' secondary school course level, gender and part-time or full-time standing, Study Team 5 found that, to a large extent, students do not have equal access.

▲ 1. Do All Secondary School Graduates have Equal Access?

The belief that the colleges are meant for the general level students, but that the colleges appear to prefer advanced level students[11] is widely held within the secondary school system. This belief is reinforced by the curriculum policy for secondary schools, OS:IS. Current data-gathering systems do not provide data on the academic record of students entering the colleges. Students may take a combination of courses, at different levels, while in secondary school. Statistics are only available to show how many Grade 12 and Grade 13 graduates enter college.

The greatest number, an average of 50 percent of students, enter college with a Grade 12 diploma. Relative to other educational backgrounds, the percentage of Grade 12 graduates entering college has been increasing over the past decade while the percentage of Grade 13 graduates has declined. Another 11 percent have completed Grade 12 and have done some Grade 13 work.[12] Certain colleges require advanced level English or Math courses, thereby excluding certain segments of the secondary school population. Only a few programmes are available for students with basic level backgrounds.

The issue may not be whether entrants have completed Grade 12 or Grade 13, but rather at what level their credits were earned. Studies conducted by Alan King of Queen's University have shown that not only are graduates of general level programmes less likely to enter college than those at the advanced level, they are also more likely to drop out of college programmes. Currently, close to 40 percent of students enroled in Grade 9 are likely to go on to post-secondary education.[13] Another 30 percent are likely not to graduate from high school, leaving roughly 30

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11 "The Relationship Between Schools and Colleges," p.31

12 "The Relationship Between Schools and Colleges," p.15

13 "The Relationship Between Schools and Colleges," p.82

percent who will graduate but not go on to college or university, at not least immediately.

▲ 2. Do Males and Females have Equal Access to Programmes?

More females than males attend college but, broken down by division, statistics show women predominantly in the health sciences (nursing) and men in technological programmes.[14] Although overall student enrolment has increased significantly, further examination of 1984-1988 enrolment figures by division shows that enrolment in health sciences remained relatively stable. In the same period, business and applied arts showed relatively strong increases, while technology experienced a marked decline.[15]

▲ 3. Do Part-time and Evening Students have Equal Access?

Although the colleges are set up predominantly to accommodate the full-time student, part-time enrolment by far exceeds that of full-time. For example, in the fall of 1988, statistics show 95,043 students enroled in full-time post-secondary programmes[16] compared to almost 600,000 in part-time programmes.[17] Currently, the Ministry of Colleges and Universities does not keep statistics on part-time students. Therefore, it is not possible to determine exactly who they are demographically.

It is known that, for the most part, these students enter the colleges briefly for short-term courses. Part-time day students generally hold full-time jobs and cannot take advantage of support services or take on extracurricular activities. And for part-time evening students, support services and extra-curricular activities are often not available. Evening courses are staffed by part-time instructors who may not have the opportunity for any professional development programmes that are available to day instructors. Since access has been defined by this Study Team as not merely the

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[14] "The Relationship Between Schools and Colleges," p.16.

[15] "The Relationship Between Schools and Colleges," p.15.

[16] "The Relationship Between Schools and Colleges," p.15.

[17] "The Relationship Between Schools and Colleges," p.18.

opportunity to enrol but, rather, the opportunity to succeed, the issue of 'access' beyond enrolment is also relevant.[18]

▲ 4. What Other Factors Affect Access?

Based on the research, it is apparent that various factors can play a key role in either facilitating access or, alternatively, creating barriers to access. School boards in particular highlighted concerns about application procedures and inconsistency of admissions policies for different groups of students. Currently, application procedures vary from college to college. A prospective applicant must examine 23 course calendars and evaluate 23 sets of prerequisites per programme of interest — an intimidating prospect for students and guidance counsellors alike. And although information in the form of calendars and bulletins may be readily available to the schools, it may not be available to students in a timely or effective manner.

The family exerts considerable influence on a student's decision to enter college. Parents, as well as students, require information as the basis for informed decision-making. An argument presented by the colleges, on the other hand, is that secondary school teachers, who are university-educated, tend to be more familiar with the university system, and favour it when it comes to giving advice. The argument is made that they are not sufficiently familiar with the colleges and its benefits for students.[19]

As noted, programme prerequisites may present several problems related to access. The Ministry of Colleges and Universities requires only that an applicant possess an Ontario Secondary School Diploma or, as a mature student, have reached the age of 19 before commencement of the chosen programme. Beyond these requirements, establishment of specific programme prerequisites is at the discretion of individual colleges under general guide-lines established by MCU. For selected programmes such as health sciences and technology, certain advanced level courses may be specified. The Study Team's inquiry indicated, however, that differences may exist

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[18] "The Relationship Between Schools and Colleges," p.30.

[19] Response to "Invitation to Participate".

between stated and functional prerequisites and that the content of secondary programmes often has not been assessed for college programme requirements.[20]

The means of information exchange can pose a significant barrier. In spite of the variety of college publications available, access to computer data and the use of other means of communication, experience has shown that the standard models for information delivery are not always appropriate in northern and more isolated locations. The results of the "Invitation to Participate" submissions indicated that although most schools boards in such areas entertained good relationships with nearby colleges, they felt isolated from more distant institutions by time, cost and distance.

The lack of appropriate college programming, a possible barrier to access for part-time and continuing education students, also affects special needs groups. Among these potential clients are francophone students, native students, and individuals with physical or learning disabilities. Vision 2000's Study Team 3 is examining ways to assist these groups.

For various reasons, some students are unable to delay moving into an income-producing situation, while others are stop-outs, later returning to a formal educational environment. For some students, the transition from school to work involves cooperative education — a combination of school and work, which allows students to earn income while also earning credentials.

In conclusion, the most significant barriers to student access are related to college admission procedures, poor dissemination of information, and rigidities in organisation and curriculum programming. Recommendations that respond to needs identified in these areas are presented later in this paper.

There are other issues related to access which are not dealt with at this time, and which will require further study. These issues concern older students who are already in the workplace, particularly those with family obligations who may be unable to take time off to earn additional qualifications due to financial constraints; the adequacy of loans or bursaries for part-time students; the extent to which workplace arrangements permit adults to take time off to pursue educational

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20 "The Relationship Between Schools and Colleges," p.33.

objectives; and procedures for selecting part-time instructors and the professional development opportunities that should be made available to them.

Studies On Success

The attrition rate in Ontario's colleges currently stands at about 45 percent. Almost one-half of those who enrol do not complete their choice of programme. In discussing attrition, it should be noted that some students 'job out.' However, there are no data which indicate, on a provincial basis, what percentage of students leave college for 'good' jobs, for which their abbreviated college experience prepared them (e.g., the college programme as a diagnostic job placement tool).

Figures for the 1982 entry cohort, typical of other findings for the years 1974 to 1984, show 26.8 percent attrition in one-year programmes, 42.8 percent in two-year programmes and 44.0 percent in three-year programmes.[21]

Studies indicate that three major influences contribute to attrition: a student's underpreparedness for college, the absence of emotional ties to the institution, and a lack of educational commitment (i.e., the determination to complete a post-secondary education).

Dr. Oppenheimer observes that a 1988 Association of Colleges of Applied Arts and Technology of Ontario (ACAATO) survey of student retention cited academic unpreparedness as a key factor determining attrition. Other findings suggest that attrition may be due to student unpreparedness in terms of making informed choices about careers and post-secondary education.[22] A lack of academic integration also appears to play a major role. Increased integration would provide students with a clearer and greater menu of educational options. According to Peter Dietsche, "the characteristics of the academic environment in commuter colleges are of greater importance in promoting persistence than those of the social environment." He concludes that the provision of a climate conducive to integration and educational commitment, tailored to the individual characteristics, needs and preferences of each student is likely to increase student programme completion rates.[23]

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[21] Source: Ontario College Information System, cited in "The Relationship Between Schools and Colleges," p.38.

[22] "The Relationship Between Schools and Colleges," p.38.

[23] Peter Dietsche, "Describing and Predicting Freshmen Attrition in a College of Applied Arts and Technology of Ontario," an unpublished Doctoral Dissertation, O.I.S.E., University of Toronto, (Toronto, 1988), cited in "The Relationship Between Schools and Colleges," p.38.

This student-centred view is supported by the work of Tinto, whose model of student retention is cited in a submission to Study Team 4:

> ... retention increases to the degree personal contact is maintained with students, high quality educational services are provided, and all members of the college community demonstrate a commitment to student success.[24]

In terms of academic preparedness, the larger problem appears to be a lack of co-ordination between secondary school and college curricula. Specific aspects of academic preparedness are generally considered to include:

- basic literacy and mathematical skills;
- critical thinking and problem solving skills; and
- knowledge of prerequisite subject areas.

At this time, there is no province-wide activity linking the skills and knowledge that students bring from secondary school with those they will need to achieve success in their college programmes. Thus, some students reach college underprepared for further study, while others may be required to repeat previous course content. As both underpreparedness and boredom contribute to a lack of identification with the institution, either situation is likely to discourage students and contribute to attrition.

Limited data on reading levels suggest that between 16.5 percent and 35.6 percent of students in full-time post-secondary programmes are reading below Grade 10 level. Although reading scores may not be an accurate indicator of actual or potential reading skills, "it is safe to assume that between 20 percent and 35 percent of students will have difficulty comprehending text material in their courses, possibly contributing to their being unsuccessful in college."[25]

Remedial instruction, therefore, becomes a major equity issue. From information provided by the colleges, there is no way to assess whether existing programmes are either adequate or effective. "It is obvious, however, that there is no consistent

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[24] Terry Dance, "Access & Quality: Preparatory and Remedial Education in the Colleges," in Challenges to the College and the College System, (Toronto: Vision 2000, 1989), p.7.

[25] "The Relationship Between Schools and Colleges," p.42.

provision of remedial assistance in the province ..."[26] Furthermore, current funding arrangements do not encourage such provision. Preparatory and remedial courses and programmes are not funded directly by the Ministry of Colleges and Universities. If a college elects to provide such courses and activities, it must do so out of general revenues, diverting funds from regular programmes and services.[27]

Colleges argue that current funding mechanisms are not adequate to provide remedial assistance for students experiencing difficulty with reading, writing, or mathematics, or to allow colleges to maintain accessibility for students who do not have minimal basic skills. The costs of remedial programmes may be offset in terms of reduced attrition and longer-term benefits to the economy, along with benefits to the individual colleges who retain more students with the current enrolment-driven funding mechanism. However, the Ministry of Colleges and Universities has argued that these costs should have been borne by the elementary and secondary systems.[28]

Some colleges, particularly in the Metropolitan Toronto area, report increasing demands for English as a Second Language (ESL) programmes. These reports are but one indicator of demographic changes in society at large. Although some colleges have multicultural committees, there is some suggestion that the colleges, as a sector, are not as open to the diversity of the community as they might be. When the student population does not reflect the make up of the community at large with respect to gender,[29] ethnicity, and class, colleges may need to determine whether this is "a result of the kinds of programmes they offer or whom they choose to admit."[30]

For some students, scheduling of programmes and activities can have a major impact. If a student fails a subject in the September semester, it may not be possible to repeat the course until the following September. Similarly, a problem exists for students with advanced standing in a particular subject who cannot progress until

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[26] "The Relationship Between Schools and Colleges," p.48.

[27] "The Relationship Between Schools and Colleges," p.49.

[28] "The Relationship Between Schools and Colleges," p.50.

[29] As noted earlier, although there is gender equity regarding "quantity" of participation, there are still gender-linked program choices which perpetuate problems of employment equity.

[30] "The Relationship Between Schools and Colleges," p.23.

the rest of the group catches up. For such students, a lack of programme flexibility creates a barrier to their success.

Some students may require guidance and support services , but these services are not universally available in the colleges:

> The role of the guidance counsellor varies from college to college and may include any of the following: orientation, career planning, program planning, assisting with personal problems, supervising tutoring, developing retention strategies, testing, liaising or professional development. This role also changes according to budgetary allowances and the perception of need by senior administrators in charge of designating student services.[31]

In addition, students may be unaware of the support services that do exist, and, as noted earlier in this document, the lack of access to such services can be especially detrimental to chances of success for part-time students.

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[31] "The Relationship Between Schools and Colleges," p.45.

School-College Links

Having identified the major barriers to student access and success, the Study Team turned to a discussion of how coordination between secondary schools and colleges could be improved and increased while maintaining the integrity of institutional mandates. Such coordination would be aimed at promoting ease of transition and mobility within the system, and enhancing each individual's chance of success.

It is the view of the Study Team that the mandate of the colleges may not necessarily require major revision as it relates to student access and success. Rather, it may require more complete implementation. An open-door policy, improved teacher education and the provision of appropriate remediation opportunities were part of the mandate given to the college sector in the 1960s. Like other aspects of the early plans for the colleges, these goals or principles have not been realized.

The mandate and governance structure also suggested that there ought to be a collaborative relationship between the secondary schools and colleges. The autonomy of the college sector, however, has tended to take precedence over collaboration, and any alliances regarding programmes and course content have generally been formed with business and industry.

Historically, the schools and colleges have operated more or less in isolation from one another, but in recent years this has begun to change. The move to greater collaboration is one that is being encouraged. The Ministries of Education and Colleges and Universities recently developed a joint "Blueprint for School-College Links" which has been distributed to college presidents and directors of education across Ontario to encourage more local collaboration. The blueprint gives a general outline for the development and implementation of local articulation agreements.

Stakeholders consulted by Study Team 5 identified numerous reasons for schools and colleges to develop more collaborative relationships, citing, in particular, financial constraints, the need to support lifelong learning and the need for better information exchange.

> With greater maturity in the the 1980s, along with declining enrolments in both systems, increasing budgetary constraints, recognition of higher than desirable dropout rates and a growing social sense that competition may be detrimental to the integrity of institutions and possibly to systems as a whole, the schools and colleges are finally coming toward each other to discuss educational issues of

> concern to each. In some cases, they are finding new solutions to old problems through co-operation and collaborative ventures.[32]

Stakeholders identified curriculum, career counselling, faculty, facilities, and human resource development as areas which would benefit directly from joint activity. Several schools and colleges are already involved in innovative schemes and joint programmes, in some cases extending participation to local business and industry as well. Current links between the two systems include formal agreements, as well as a variety of informal arrangements. Some of these are discussed below.

There is a further need, however, to clarify and expand the role of business and industry. Although employers are represented on college advisory committees, as observed earlier, the curriculum committees envisioned in the original mandate of the colleges have never taken shape. Study Team 5 heard from stakeholders of the need for a formal means to facilitate three-way dialogue: between the colleges, the secondary schools, and the world of work. Study Team 4 examined membership on boards and advisory committees and also has recommendations in this area.

▲ Formal Agreements

Members of the Study Team heard many calls for clear, mandated, mechanisms that would co-ordinate programmes and curricula between systems. There were also suggestions for regional forums or collaborative committees to review delivery of programmes in a geographic area, as a means to ensure that all appropriate programmes are easily available to a region's communities. However, a question arose concerning how to provide provincial guide-lines for new initiatives while keeping programmes responsive to local needs.

Formal links that already exist include co-op education programmes, the Student Workplace Assistance Program (SWAP), and articulation agreements between specific colleges and their local school boards. School boards and colleges participating in programmes of this nature have experienced or anticipate numerous benefits related to student access and success. However, in general, the availability of such programmes is not well publicized, nor is it consistent across the

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[32] "The Relationship Between Schools and Colleges," p.51.

province. For students in schools that are not party to such arrangements, both factors pose barriers in terms of equity of access.

And while the prospect of expanded articulation agreements appears to be generating considerable interest and enthusiasm, the administration of such projects is complicated and time-intensive and may eventually require some ground-rules or even province-wide guide-lines or regulations with respect to their governance. Among related matters for consideration are the possible effects of major policy shifts in either sector, the fact that students may be entering college with even greater variances in skills and needs, and costs associated with providing release time for staff and faculty to work on articulation.[33]

▲ Informal Arrangements

In addition to the agreements mentioned above, increasing numbers of secondary schools and colleges are entering into more informal arrangements as a means to improve their efficiency, effectiveness and ability to serve the needs of students. Some areas where informal arrangements are possible are described below:

CURRICULUM

Any fundamental shift in emphasis in curricula at the secondary school level has repercussions at the college level. If the secondary schools move away from specific vocational skills training and toward more generic skills development, for example, there would be an impact on college programme offerings and entry requirements. Some collaborative measures might be necessary if "the two systems are not to move in conflicting directions and create a situation in which students are even less prepared for college and the workforce." Participants in one Ontario articulation project note additional benefits of a joint mandate for curriculum as "greater assurance that students will have the necessary prerequisite skills for more advanced courses, and a possible forum for the analysis of course content to ensure that all material is relevant to essential completion competencies."[34] Several boards and colleges have already successfully integrated their curricula, and some have extended this collaboration to include joint use of faculty and facilities.

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[33] "The Relationship between schools and Colleges," pp. 68-69.

[34] "The Relationship Between Schools and Colleges," p.53.

EXCHANGES OF PERSONNEL AND OTHER PROFESSIONAL DEVELOPMENT STRATEGIES ...

Although existing contracts and union affiliations may make the sharing of faculty and support staff somewhat difficult, precedents do exist. A variety of different types of secondments and exchanges show promise in providing exchanges of ideas and methods, and renewal of personnel. Also, advantages accrue in areas with insufficient demand for full-time teachers at both the schools and the colleges, or at times of fluctuating enrolment. Exchanging college and secondary personnel provides opportunities for each to become more knowledgeable about the other's institutions and methods. These exchanges can indirectly result in an increase in information given to students wanting to explore the colleges as a educational option. In addition, there are several examples of college personnel being used as the professional development leaders for high school personnel, particularly in the area of technology.

FACILITY SHARING

Student success may also be enhanced through exposure to college facilities. Both schools and colleges have financial limitations related to capital expenditures. Lack of funding for a laboratory or similar facility may affect a student's ability to succeed in his or her first chosen career. This is true especially in such fields as technology or hospitality, and for northern and outlying schools and colleges. Several schools and colleges are already sharing facilities.

CAREER-COLLEGE COUNSELLING

Career counselling has been identified by some educators as a shared responsibility of the schools and colleges. The guidance function has been highlighted in the secondary schools, and colleges are already involved in the college counselling of secondary students. However, as a significant number of college students drop out because their career goals are not clear, college counsellors may not yet be doing as much as is needed with respect to career counselling. Increasing understanding of the college sector and the opportunities it affords on the part of secondary school counsellors and teachers will also help students in gaining broader career advice. This understanding should be promoted during teacher education at the university level. As noted earlier, university-educated secondary school teachers are perceived by the colleges as tending to favour university over a college education.

▲ Integrating the Role of Business and Industry

Both schools and colleges share the responsibility for preparation of students for the world of work. In turn, the marketplace relies on the education system for the provision of skilled labour. College programmes in particular must reflect labour market demands, and course content has traditionally been developed in conjunction with business and industry. As well, co-op and other job-oriented programmes in both sectors provide students with specific job experience.

However, as market demands change, students need to develop skills that will enable them to move not only into their first job, but into their fifth or sixth as well. They should be able to transfer comfortably to another company or another province, if need be.

Human Resources Development

Study Team 5's focus on access and success resulted in the identification of an underlying need for increased development of college faculty, support staff, and administrators.

In a study prepared for The Association of Canadian Community Colleges entitled *Towards the Year 2000: Canadian Community College/Technical Institute Heads Predict Institutional Challenges and Uncertainties (1988)*, Dr. Michael Sinclair listed some human resource issues that colleges must tackle in the near future. For example, an aging faculty, a lack of creative, targeted staff development programmes, and the importance of recruiting and selecting personnel that will have the skills and interest to remain current. It might be said that the key to facilitating lifelong learning for students is for them to be taught by lifelong learners:

> Facing the information explosion, constantly expanding social demands and rapidly altering approaches to teaching, teachers understandably are having difficulty 'keeping up' with change.[35]

If faculty are to design and implement multifaceted programmes to help students succeed, then they must have the opportunity to access the current thinking on student success strategies and the current methods for implementation. College faculty must be able to use appropriate methods for teaching adults, learners of diverse ethnic and racial backgrounds, and underprepared students. Student success may depend on the understanding and skill that faculty and administrators display in teaching a heterogeneous student body.

Study Team 5 discussed the need for programmes to keep faculty current in their fields. The question of teacher accreditation was discussed and the Study Team felt further study of this subject was necessary. With rapidly changing technology, faculty must have leadership and opportunities for increased development in their subject-area fields and in their roles as professional educators. Furthermore, if consistency and coordination between the high school and college curriculum will enhance the students' chances of access and success, then faculty must be familiar with curriculum design, development, implementation and evaluation.

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35 "The Relationship Between Schools and Colleges," p.54

There is a need for broader and more consistently available initiatives aimed at increasing the mutual understanding of college and high school teachers and guidance counsellors. Students need counselling that will assist them in making informed decisions concerning their educational and career choices. As stated earlier in this report, the information students receive from teachers and high school counsellors may be confusing or incomplete. Coordination of entrance and exit standards and curriculum will remedy this to some extent, but without a knowledgeable, willing, and informed person to counsel students, communication efforts may suffer.

Some joint programmes and collaborative efforts have taken place. The colleges, under the leadership of the Committee of Presidents, have begun to focus and coordinate human resource development programmes in the college system. The COP's Human Resource Development Steering Committee has begun to provide the practical leadership. These efforts need to be greatly expanded and should include a sensitivity to the themes of student access and success noted in this report.

Recommendations

Based on the foregoing discussion and as a result of the research and consultations undertaken by the schools-colleges subcommittee of Study Team 5, the following recommendations are offered for the Steering Committee's consideration.

▲ Recommendation 1

THE CHALLENGE:

The need to provide better links between high schools and colleges for students of all age groups is a crucial challenge facing Ontario. Improving the bridge which connects students with high school credentials to college studies is an important part of the fight against educational attrition and for the realization of a society where lifelong learning is both accessible to all and worth the effort. Ontario faces the additional challenge of making effective use of its educational resources at a time when the demand for knowledge in the workplace and the community at large is constantly expanding.

THE RESPONSE:

1. The relevant ministries (e.g., MCU/MOE) and the colleges should jointly establish a Provincial Schools/Colleges Coordinating Council. The Council should include representation by all relevant stakeholders, such as students, teachers, faculty, school boards, and universities.

The Council would perform the following functions:

i) provide a forum for the coordination of the curricula, including a learning and teaching 'interface' between schools and colleges;

ii) facilitate the collaboration of schools and colleges in the development of new curricula;

iii) develop strategies to encourage coordinated local and regional 'linkage' activity (e.g., Local Education Councils).

iv) regularly publish a compendium of local 'linkage agreements' and foster the development of innovative agreements (such as joint offerings);

v) provide a framework for a coordinated communications effort aimed at giving students better and more accessible information concerning high school exit standards and college entrance standards;

vi) establish and maintain a data base which allows for the assessment of accessibility for all high school entrants to college and the extent to

which the broad range of services necessary for them to successfully complete their educational objectives are in place;

vii) actively promote and facilitate college-based delivery of adult basic education.

By concentrating on the links between schools and colleges, the Council is intended to assist students in realizing their educational aspirations across the entire spectrum of choices. The quantity and quality of the options facing learners depends upon schools and colleges working together with universities to expand and clarify Ontario's educational horizons.

▲ Recommendation 2

THE CHALLENGE

Making the links work for high school graduates through effective provincial coordination is an important step. But, a crucial part of the picture is the extent to which local colleges are able to: assess needs and performance, undertake planning and evaluation, and adopt action plans. Simply establishing better links on paper is a necessary but not sufficient condition for achieving the goals of improved accessibility and higher success rates.

THE RESPONSE:

2a. All college Boards of Governors undertake and monitor the results of local strategies aimed at improving student access and success.

2b. Each college establish a means of conducting specific research and policy analysis on access and success. At a minimum, the college must be able to furnish the Board of Governors, local School Boards and the Provincial Schools/Colleges Coordinating Council with consistent data, strategic policy advice, and regular assessments of progress.

▲ Recommendation 3

THE CHALLENGE

Many college students are 'underprepared' for college studies. Consequently, it is difficult for them to realize their own educational objectives or those of a more complex and knowledge-intensive society. The challenge is to implement retention strategies which begin where the students are. The task for colleges is to provide a learning environment tailored to student success. This 'success environment' spans a wide range of services, from career counselling and financial assistance to

preparatory and remedial courses. The range of students who need to see their commitment to education matched by the colleges commitment to them spans dropouts, immigrants, returning workers, high school graduates, single parents, seniors, special needs and part-time students, and more.

Another related challenge pertains to the systemic barriers to access facing part-time students. These obstacles, in the realms of scheduling, location, format and requirements for completion of a credential, must all be removed if the vision of colleges as lifelong learning institutes is to be fully realized. There is little doubt that students in greater numbers will combine work and continuing studies. This demand for part-time studies will come from increasingly diverse groups whose previous training, education, experience, and needs may not 'fit' the traditional educational format. In addition, part-time students need to understand the differences among and between various continuing education offerings from different institutions in their communities and they need to be taught by knowledgeable well-trained teachers who have access to professional development programmes. In short, the part-time learners of tomorrow will require and demand delivery methods sensitive to their prior learning and to their limitations of time and place.

For Study Team 5, the focus is on how inter-institutional cooperation can help to meet the challenges; other study teams have considered these issues in a broader context. Building more effective links between high school credentials and college programmes is an important part of the solution, but more is required. Specifically, a concerted effort is needed to clear up the confusion surrounding adult basic education and literacy. For students, the lack of coordination leads to wasted time and discouragement. For the educational institutions charged by the public with the task of providing this crucial service, the lack of clear lines of fiscal responsibility makes it difficult to set goals, allocate resources according to need, or innovate. The challenge is not just to realize better coordination, but more accountable and clearly defined lines of financial responsibility. Similarly, in the realm of preparatory and remedial education, there is a need for explicit funding, programming and inter-institutional cooperation. Study Team 5 believes that if the colleges are committed to an open-door policy, then the colleges have a responsibility to provide the necessary support for students to succeed.

The challenge is to serve student needs rather than the needs of institutional boundaries. The difficulty of clarifying the lines of fiscal responsibility may be partly overcome by using a collaborative mechanism (the Coordinating Council) for assessment and the establishment of criteria. The Council's challenge will be to facilitate cooperation by different educational institutions in the provision of services. The goal is to realize a system where location, time and duration of courses will be designed to serve student needs without any reference to the source of funding.

THE RESPONSE

3a. The Ministry of Education should have sole funding responsibility for adult basic education/literacy/chronic unemployed youth programmes. In this context, it would be the obligation of both College Boards of Governors and the Provincial Coordinating Council (see Recommendation 1) to facilitate and directly encourage college-based delivery of these programmes where and when needed.

3b. College-based preparatory and remedial strategies which address college-level skill requirements should be explicitly funded by the Ministry of Colleges and Universities. The task of setting out the criteria for the funding eligibility of college-level preparatory and remedial undertakings, as distinct from basic-level skills which would fall within the funding jurisdiction of the Ministry of Education (see 3a above), will be one of the central tasks of the Coordinating Council (see Recommendation 1).

3c. Colleges must provide full student support services to part-time and evening learners, and government funding mechanisms must reflect this.

3d. Where colleges, school boards, and universities work within a common and definable community, the government should assist with the establishment of 'continuing education councils' to coordinate, consolidate and diversify part-time credit and non-credit offerings.

3e. All colleges should establish part-time learner advisory committees, made up of current and recent part-time students, to advise the college on matters related to content, delivery, and support services for part-time learners.

3f. Study Team 5 urges the Vision 2000 Steering Committee to ensure that the vision of Ontario's colleges for the next century encompasses the full range of structural changes necessary to provide what are today called part-time students with a realistic chance to make lifelong learning work (through such mechanisms as 24-hour availability, modular courses and credentials, off-site services, etc.).

In responding to the challenge of serving Ontario's diverse student population with such a wide range of preparatory needs, the goal is to put in place a system where lines of responsibility are clearly defined and delivery is a cooperative effort capable of responding flexibly to student needs.

▲ Recommendation 4

THE CHALLENGE

Keeping skills and knowledge current in today's rapidly changing world is a challenge for every sector and person in Ontario. For colleges, this challenge takes many forms, one of which is adapting to the changing needs and aspirations of students. The colleges will be required to adopt and implement strategies which ensure that **all** those who work in the colleges are capable of providing a learning environment where student access and success are everyone's business. From the vantage point of inter-institutional cooperation, there are a wide range of potential initiatives, from special train-the-trainer programmes to enhanced job mobility between institutions.

A related and equally challenging task is the need to provide students with accurate and timely information about Ontario's colleges and the overall implications of post-secondary education for their career potential. The difficulty of this task is not made any easier by a wide range of systemic biases, from the low status of many trades to the university background of high school teachers and guidance counsellors. As Ontario works to create a society where lifelong learning is a reality, we must work to overcome the information barriers which divide up the educational spectrum and deny students an open horizon for learning.

THE RESPONSE

4a. The colleges, schools, universities and government must work to establish a framework and means for cooperative endeavours across the full range of human resource development activities.

4b. The newly formed Teacher Education Council of Ontario should include effective college representation.

4c. The Teacher Education Council of Ontario should also be assigned the responsibility to ensure that all teacher education programmes — preparatory and in-service — include components which furnish an in-depth knowledge of the educational services offered by colleges. In fulfilling this responsibility, it will be essential to explore other human resource strategies that are designed to increase elementary and high school-based information and experience with the college system (e.g., job exchanges). In this framework, education about the colleges should be an explicit component of professional development for school guidance counsellors, teachers and principals.

▲ Recommendation 5

THE CHALLENGE

The search for efficient means of providing and collecting information is one of the central preoccupations of our knowledge intensive society. For students, the cost of acquiring information about colleges and then supplying registration information to colleges can be a barrier to educational fulfilment. Similarly, for policy planners and guidance counsellors in all areas of the educational spectrum, the collection of data necessary for understanding student needs and characteristics can be prohibitively expensive. Meeting these information challenges is a crucial part of realizing our goals for lifelong learning. Three distinct tasks can be distinguished: a) the need to streamline the application process; b) the need to reduce information costs to students, administrators, counsellors, teachers, and planners; and c) the need to introduce mechanisms for consistent, simplified and equitable assessment for prior learning/credit banking.[36]

THE RESPONSE

5a. The colleges must establish consistent and simplified application procedures which would facilitate student entry and improve administrative coordination. Establishing an applications centre, possibly associated with the Universities' Guelph Centre, should be actively considered.

5b. The colleges should work together to improve the efficiency and effectiveness of data collection for the purposes of system-wide strategic planning, on-going student tracking, lifelong credit banking, and the dissemination of information.

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[36] Both assessment for prior learning and the concept of being able to accumulate educational achievements in commensurable units throughout a persons lifetime are complex issues. Although the Study Team did not delve into the mechanics of realizing these goals, there is a clear sense from both the consultations and research that more work needs to be done. Indeed, the improvements to the links amongst schools - colleges - universities will depend upon a cooperative effort to define and implement systems for assessment of prior leaning and credit banking.

Links Between the Colleges and Universities

Process

In undertaking to examine the colleges in relation to the educational spectrum, Study Team 5 established a subcommittee to address programme links between colleges and universities. The subcommittee determined that it should attempt to answer the following questions:

- Is there a **need** to improve the opportunities for college students and graduates to undertake advanced training at the degree level?
- If required, what **enabling mechanisms or structures** should be in place to facilitate the development of such opportunities?

This part of Study Team 5's report deals with these and related questions, and, where appropriate, provides recommendations for the Steering Committee's consideration. The predominant focus of the sections which follow is the issue of access to advanced studies at the degree level for college students and graduates.

However, while the Study Team concentrated on access to advanced training for college students who wish to pursue such studies, it was recognized that there are two other major issues which are relevant to these discussions. One concerns opportunities for university students who wish to undertake college programmes; the other involves student transfers between programmes within the same college and between colleges. Both of these issues are important.

The view of Study Team 5 is that there is a need to provide university students with reasonable access to college programmes, with fair credit for their university work. The current proportion of students with university experience attending colleges — in 1986-87, 5.2 percent of the 95,000 full-time post-secondary student population in colleges had some previous university experience and an additional 1.7 percent were university graduates — indicates a not insignificant demand for college entry. Although most of the argument in this part of the report concentrates on movement the other way — from college to university — some of the potential mechanisms discussed for fostering better links between the university and college sectors will benefit university students seeking credit for their university experience at the college level.

The issue of inter-college and intra-college movement by students is also a concern of the Study Team, but it is not dealt with in this report because it is the subject of recommendations by Study Team 4.

As part of the process of receiving input on college-university links, Study Team 5 commissioned and received several discussion papers which address either directly or indirectly the issue of pressures for more advanced learning opportunities for college students and the implications. The Team also sponsored consultations with five representative bodies to discuss college-university relations. In addition, a survey of colleges was undertaken to determine what formal arrangements have been put in place to facilitate access of college students to university studies. The background papers, which are listed in Appendix 2, served to expand the Study Team's knowledge on a range of issues, and helped to focus discussion.

This chapter begins with the first question: Is there a need to improve opportunities for college students and graduates to undertake advanced training at the degree level? There is a discussion and assessment of the current and future context in the section which follows on the next page. In the third section, entitled "System Objectives," the Study Team sets out the objectives for the post-secondary system. The report then looks at potential mechanisms to improve degree-level opportunities, with accompanying recommendations in the section called "Improving Opportunities: Potential Mechanisms." Lastly, we deal with related issues and recommendations, specifically college credentials and general accessibility to universities for qualified and unqualified high school graduates.

Assessing the Current and Future Context

This Section addresses the current and future context, with particular reference to three issues: a) pressures for degree studies; b) current college-university arrangements; and c) polytechnic education. The report approaches these issues through a discussion of two assertions which some have made for many years now and which are increasingly attracting attention. Those assertions are:

- the opportunities for college students to further their education at the university level are limited, and unnecessarily so; and
- in certain fields, especially in technical fields, the economy will require a more advanced level of training than that currently provided in Ontario's colleges. This advanced-level training will embody elements of activities undertaken in both colleges and universities (e.g., degree-level polytechnic education).

▲ Pressures for Degree Studies

With respect to the first assertion, let us first ask why the issue itself is important. If individuals are to maximize their potential, their ability to move among institutions within the post-secondary sector should not be unduly restricted. Most college post-secondary students, almost 85 percent, enrol in a college programme at an age of 24 or younger. An educational-career decision made at this relatively young age should not limit the opportunities to embark upon other educational-career paths. But unless it is possible to receive a fair amount of credit for courses taken at a college and for relevant work experience, effectively the doors to university studies will be closed for many.

Once a student has completed two or three years at a college and then worked for several years, the decision to return to school is often constrained by family, job, and financial considerations. It is particularly important, then, that the returning student be able to complete his or her university studies in as short a time as possible. Also, the initial decision to attend college or university will be affected by the lack of potential to transfer to university with advanced standing; some students, possibly ones who are better suited for college programmes than university programmes, will choose university over college because they will conclude that it will be difficult to attend university at a later date.

There are pressures on college graduates to pursue degree studies. In an increasing number of fields of study, the training required, particularly in terms of theory and technological applications, is becoming more sophisticated. In addition, the practice of credentialism encourages students to seek the educational qualifications most likely to lead to admission and advancement in their chosen occupational field. A third factor involves the concept of lifelong learning: With economic and social changes occurring at a rapid pace, more and more workers are seeking retraining, either within their own field or branching into a different one, to enable them to meet new challenges in their lives.

None of these pressures is likely to subside; if anything, they are likely to increase as we approach the 21st century. The practice of credentialism, for example, is not expected to diminish. As an indication, in the fields of nursing, physiotherapy, and industrial accounting, professional associations are attempting to make possession of a degree a prerequisite for entry into practice. Others are likely to follow, in such fields as child-care, early childhood education and social services. The motivation for instituting degree requirements may be to enhance the stature and bargaining power of those in the profession or to ensure that the practitioners are of high quality, or both. It is likely that at least some of the professional associations seeking degree 'status' will achieve it.

On the employers' side, credentialism is also well entrenched. Those who have examined the issue of credentialism have concluded that this practice on the part of employers would be difficult behaviour to change, short of excessive government regulation or serious labour shortages.

Based on the arguments and the evidence available, the Study Team has concluded that to achieve an effective utilization of Ontario's human resources, qualified CAAT students and graduates must be provided reasonable opportunities for obtaining degree-level training. Further, from a more basic perspective, that of fairness to students, such opportunities must be provided.

The Study Team wishes, however, to add a cautionary note. While one can document the kinds of pressures that may come to bear on college students to take degree studies, there are serious difficulties in estimating, even in gross terms, how many college graduates might be affected by these pressures and how many might respond to them by seeking further education at the university level.

It is the Study Team's view that the number of students who would enrol in university programmes after college depends in large part on the availability of university programmes with advanced standing provisions, and on the amount of credit awarded for college courses and relevant work experience.

Study Team 5 believes that work should be undertaken to provide better estimates of the types and numbers of students seeking degree-completion opportunities.

▲ Current College-University Arrangements

As noted in the introduction, Study Team 5 commissioned a survey of the colleges to determine what formal arrangements, designed to facilitate college students' access to university programmes, have been developed. Nineteen of the 22 colleges responded. While the survey did not capture 100 percent of the arrangements in place, discussions with representatives of the college and university sectors indicate that most of the existing arrangements were reported.[37]

The survey showed some real momentum developing in terms of the numbers of arrangements being made in the last few years. Colleges are increasingly embarking on the development of programme arrangements with universities. (Only 3.4 percent (1,362) of new registrants at Ontario's universities in 1986-87 had attended college at some time.)

The responses revealed that, in total, 27 programme-specific arrangements were operational, of which 23 were advanced standing arrangements and four involved the joint provision of a programme by a college and university. Of these 27 arrangements, 17 were implemented since 1979, and 11 of the 17 were implemented in 1988-89 alone. In addition to these arrangements, others are about to be implemented or negotiated which will bring the number of colleges with arrangements from the current level of 12 to 14.

Typically, the arrangements involve a programme-specific agreement between one university and one college. However, there are a few universities which have province-wide policies on credit for college courses in selected programme areas. There are also a few instances where a university has developed arrangements with

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[37] The Council of Ontario Universities has also collected data on college-university links; information from COU should be cross-referenced with Marshall's data.

two or three colleges for selected programme areas. Most of the programme arrangements are in the liberal arts area and/or in areas that feed the service sector. Early childhood education, business and general arts and science programmes are the areas in which arrangements are most common.

About one-third of all the arrangements involve universities in the United States. Two factors are important here: Some colleges are located in close geographic proximity to American universities, and American universities have a long tradition of college-to-university transfers in the U.S. system.

In order to evaluate the impact of programme-specific arrangements, the survey compared the credit given to college students under these arrangements to the general provisions for credit for college experience found in Ontario university calendars. In the absence of formal programme-specific arrangements with a college, the maximum credit given to college students enroling in university programmes is five credits or the equivalent of one year of university, provided they meet specific requirements. The survey found that, in general, college students received somewhat more credit under programme-specific arrangements with Ontario universities.

Survey respondents indicated that a major reason for developing arrangements with a university is that they made college programmes more attractive to potential students and were seen as a means of increasing enrolment in particular programmes. Another reason frequently cited was that the arrangements were seen as a means of enabling each institution to contribute what it does best to the education and training of students. On the whole, neither advanced standing nor joint programme arrangements have led to, or required, significant changes in the nature of college programmes. Some respondents noted some increase in emphasis being placed on analytic and communication skills.

The survey results give some reason for optimism. They indicate the development of momentum in the numbers of programme-specific arrangements. Such arrangements may be beneficial to students not only in terms of potentially increasing the amount of credit for college experience, but also in terms of providing students with more certainty about the credit they can expect to receive for their college work. Further, such arrangements do not seem to require significant changes to college programmes. This latter finding is also important. The Study

Team believes, as do the college officials responding to the survey, that the further development of arrangements with universities should not adversely affect the colleges' ability to serve those seeking the vocationally-oriented training traditionally provided by colleges.

The findings, however, also point to some potentially serious weaknesses in what might be termed the bilateral or *laissez-faire* model for developing college-university programme arrangements. This approach, at least to date, appears to yield rather limited and quite uneven opportunities for college graduates wanting to enrol in university programmes in Ontario. Arrangements exist for only a limited number of programmes, and there are very few arrangements in the more technical fields (e.g., technology programmes). For the most part, arrangements for a particular programme exist only at one or two colleges, and not at other colleges offering the programme. In addition, a college undertaking to establish arrangements in a particular programme area tends to negotiate agreements with only one or two universities.

Despite the momentum that has developed, the Study Team believes that the unevenness of opportunity which still exists across the system is such that there is significant scope for expanding and improving degree-completion opportunities for CAAT students and graduates.

▲ Polytechnic Education

We now turn to the second assertion — the need for more degree-level polytechnic education. Polytechnic education may be defined as career-oriented education which is a "blend of theory, context, and application, but with the predominant emphasis on the applied; it is the specific mix of the three elements which determines the level of any particular program, and whether it is likely to be offered at a college or university." (Terence Grier, President of Ryerson).

Ontario's post-secondary system — the colleges, universities and Ryerson — offers polytechnic education in varying amounts and at various levels. This type of education embraces a wide range of applied fields, from applied arts to business, and from community and health services to technology and engineering.

The assertion that more degree-level polytechnic education is required, particularly in technical fields, is largely based on the growing evidence that the North

American economy requires some fundamental restructuring. Analyses undertaken by the Premier's Council[38] in Ontario and the MIT Commission on Industrial Productivity[39] in the United States have led these bodies to conclude that more emphasis must be placed on the development of high value-added manufacturing industries which can compete in world markets. Both groups warn of the perils of neglecting this type of economic activity.

The MIT study states:

> Some see a transition from manufacturing to services as an inevitable and desirable stage in the economic development of the nation, with the U.S. increasingly leaving manufacturing to other countries. We think this idea is mistaken ... One reason is that it would have to rely on exports of services to pay for its imports, and this does not seem realistic... There is also reason to believe that if large sections of American manufacturing industry were ceded to other countries, high-wage nonmanufacturing industries would follow them, including many of the service industries that provide inputs to manufacturing, such as design and engineering, payroll, inventory and accounting, finance and insurance, transportation, repair and maintenance of plant and equipment, testing services, and the like. The United States has no choice but to continue competing in the world market for manufactures ... Manufacturing firms account for virtually all of the research and development done by American industry ... The roots of much of the technological progress responsible for long-term economic growth can ultimately be traced to the nation's manufacturing base. (pp. 39-41)

The Premier's Council stresses that:

> The traded sectors must be viewed as the fundamental drivers of our future wealth and prosperity ... the job creation capacity of the non-traded sectors is tied to the wealth creation capacity of our traded sectors. Job creation in restaurants, hospitals, department stores, real estate, bus systems, secretarial services, law firms ... will depend on increasing competitiveness and higher value-added per employee in our traded industries. (p.41, Vol. 1)
>
> High growth businesses are critical for the future prosperity of industrialized countries. They include industries like

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38 Premier's Council, Competing in the New Global Economy, 1988.

39 The MIT Commission on Industrial Productivity, Made in America — Regaining the Productive Edge, The MIT Press, 1989.

> telecommunications equipment, computers, aerospace, and medical equipment. Ontario has a serious competitive problem in high growth industries. The province has a major trade deficit here; it imports twice as much of these goods as it exports. (p.59, Vol.1)

Recent analyses such as those undertaken by the Premier's Council and MIT have added weight to the growing concern in the last few years about the impacts of the knowledge explosion, the information age, the rapid pace of technological change and the increased economic competition associated with economic globalisation. These concerns have led many to conclude that educational reforms are required if Western economies are to prosper in the 21st century.

The need for educational reform has not been confined to any particular level of education. For example, the Premier's Council expressed concern about the ability of Ontario's elementary and secondary schools to equip students to enter science and technology fields at the post-secondary level; and the MIT Commission devoted a chapter of its study to how universities should change.

What is most pertinent to the Study Team are the calls for Ontario's post-secondary system to expand the opportunities for degree-level polytechnic studies, particularly in technical fields. The Study Team views with concern the trend during most of the 1980s for a declining proportion of students to enrol in college technology and university engineering programmes. Study Team 5 believes that if this province is to successfully undertake the proposed 'restructuring' of its economy, more polytechnic education in Ontario will be required. What is not as clear is the level at which opportunities for polytechnic education should be expanded.

Some of the background papers provided to the Study Team advocate an expansion of degree-level polytechnic education. However, that view is not universally shared. Terence Grier, President of Ryerson, is among those who interpret reports such as that of the Premier's Council as indicating that "the larger need is for more and better students at the diploma level, in the technician-technologist area."

The issue of level of polytechnic education has received sporadic attention since 1980 when the Ontario Ministry of Colleges and Universities commissioned a study on polytechnic education in England and Wales, and issued a discussion paper entitled "Polytechnic Education in Ontario." As yet, definitive conclusions have not been reached.

It is the Study Team's conclusion that this issue cannot be greatly clarified through further abstract, macro-level research. Without specific sectoral studies and without, for example, a clear sense of the industries in which the provincial and federal governments intend to focus industrial assistance, it is extremely difficult to project what new initiatives may be required in polytechnic education. In the absence of such information, neither the programme areas nor the level of education required is readily discernible.

What this Study Team *expects* is that in some instances more and better trained students will be required at the college diploma (technologist) level, and in other instances more students will be required in certain (technical) fields at the baccalaureate level.

System Objectives

The Study Team believes that the major justifications for expanding and improving the opportunities for college students to participate in more advanced training, such as degree studies, are:

- *equality of opportunity* — adherence to the principle of equality of opportunity requires that qualified college students have access to these opportunities; and
- *future human resource requirements of the province* — meeting future social and economic needs may require an expansion and improvement of these opportunities.

In addition, equality of opportunity and future provincial human resource requirements are also important considerations in the provision of opportunities for university students seeking the applied training offered by colleges.

Based on our analysis, the Study Team supports the following objectives for the post-secondary system in Ontario:

Ontario's post-secondary system should:

1) *Improve and expand degree-completion opportunities for qualified college students and graduates;*
2) *Improve opportunities for university students and graduates to move into applied programmes at colleges; and*
3) *Where indicated by specific, economic sector analyses of educational needs, increase the availability of degree-level polytechnic education;*

In meeting these objectives:

- *Ontario's colleges should remain committed to providing access to vocationally-oriented education at the certificate and diploma levels.*

Improving Opportunities: Potential Mechanisms

Having agreed on these objectives, the Study Team turned to consideration of possible mechanisms for achieving them. In selecting the options for inclusion in this report, the Study Team took into account several factors, but was particularly cognizant of the uncertainty surrounding the future level of demand from college students for degree-level studies.

In this section, we explore the merits of potential mechanisms for facilitating the expansion of degree-level opportunities for college students and graduates. First, the pros and cons of a provincial coordinating body for combined college-university studies are discussed, followed by an examination of the merits of establishing a provincial institute on academic awards for combined college-university studies. The possibility of providing opportunities for more advanced training through establishing degree-level programmes at the colleges is then explored.

It should be noted that the Study Team is not proposing the building, in a physical sense, of new post-secondary institutes, such as a polytechnic or a university of applied arts and technology. While such options may need to be considered at some point in the future, it is the view of the Study Team that the objectives set forth in this report can be largely met in the coming decade through the utilization of the teaching and physical resources currently available in Ontario's colleges and universities.

Nor is there included in this section any proposal for the wholesale transformation of selected colleges into degree-granting polytechnics. Such a decision would negatively affect the status of those colleges which did not receive the polytechnic designation, with potentially serious consequences in terms of students' decisions to attend college.

▲ a) Provincial Coordinating Body for Combined College-University Studies

MANDATE AND FUNCTIONS:

As one of its major responsibilities, the provincial coordinating body would provide leadership in the development and improvement of college-university arrangements designed to provide students with opportunities for combined college-university studies.

As is current practice in the post-secondary system, opportunities would be structured in a variety of ways, depending on the nature of the students and programmes, including:

1) **advanced standing arrangements in related fields of study**, whereby a college graduate, for example a business graduate, would be granted advanced standing in a university commerce programme and, after completing selected courses at a university, would receive a B.Com.;

2) **general transfer credits for students moving between unrelated fields of study**, whereby a college student or graduate, for example a business student, would be granted advanced standing in a university social work programme and, after completing selected courses at a university, would receive a B.S.W.;

3) **custom degree-completion programmes** for college graduates at universities, whereby college graduates, with their own course sections, complete degree programmes. Two examples of custom programmes are Lakehead's engineering programme and Ryerson's child and youth care programme;

4) **joint programme offerings** by colleges and universities, whereby a student would concurrently take university and college courses and, upon successful completion, receive a college diploma and university degree; and

5) **diploma completion arrangements**, whereby a university student or graduate would be granted advanced standing in college diploma programmes.

(Note: While this section has concentrated on the issue of opportunities for advanced training for college students, both (4) joint programmes and (5) diploma completion arrangements represent important means for improving the accessibility for university students to take applied training provided by the colleges.)

Another and equally important responsibility of the coordinating body would be the initiation and coordination of analyses by industrial and/or occupational sector of the need for polytechnic studies, in particular, the need for degree-level programmes in technical fields. Where need is demonstrated, the provincial body would provide leadership and coordination in the development of polytechnic opportunities for secondary school graduates and college and university students.

The provincial coordinating body would **not** have executive authority with respect to college-university arrangements, but would provide leadership and, where necessary, mediate 'disputes' at the request of institutions. The provincial

coordinating body could be delegated responsibility by the Ministry for allocating grants to assist colleges and universities in the development of custom and joint programmes.

The provincial coordinating body would publish annually a calendar describing all advanced standing and joint programme arrangements between Ontario's colleges and universities, as well as arrangements between Ontario's colleges and institutions in other jurisdictions.

The provincial coordinating body would submit a report to the Minister describing its activities annually. The report should include a discussion of factors facilitating and inhibiting the development of programme arrangements between colleges and universities, and summaries and implications of analyses of the need for expansion of polytechnic studies.

MEMBERSHIP:

Given the range of functions, the provincial coordinating body should include representatives from: (i) the colleges; (ii) the universities; (iii) business and industry; (iv) labour; and (v) government. With respect to the colleges and universities, students (or alumni), faculty, administrators, and boards of governors should be represented.

RESOURCES:

The main resources required by this body would include:

- a small permanent secretariat;
- a research budget to support the sectoral analyses of educational needs;
- funds to support the development of custom degree-completion programmes and joint college-university programmes; and
- funds to support the publication and dissemination of a calendar of combined studies.

DISCUSSION:

In some respects, this does not represent a significant change from the current situation. All the structural forms described above exist to some extent in the post-secondary sector now. And while the coordinating body would encourage and provide leadership in the development of college-university links, it would not

have the authority to 'force' arrangements upon colleges and universities; colleges and universities would retain their autonomy in this area.

Nevertheless, the introduction of the coordinating body into the process could lead to a more planned and collective approach to the development of college-university links. Further, in the case of polytechnic programmes, it would provide a means for establishing market needs more definitively than at present, and would provide a focal point for further development of such programmes within Ontario's post-secondary system.

The ultimate success of the coordinating body, however, would depend largely on the priority given by individual colleges and universities to the development of arrangements. In this respect, the Study Team has some concerns. College-university links may not be a particularly high priority with some universities. From the perspective of geographical location, many college students may continue to have limited opportunities. If college-university links are not a high priority, it is less likely that more flexible approaches to the provision of advanced standing (e.g., credit for relevant work experience) will be adopted.

If there is reluctance among some colleges and universities to engage in the development of college-university links, the coordinating body might encourage the development of a consortium or consortia, whereby colleges and universities with reasonably **common** objectives would work together on developing arrangements. To initiate this approach, the coordinating body could establish some principles on which arrangements should be based and then ask which colleges and universities want to participate. With time, one might find increasing numbers of colleges and universities participating.

The Study Team is aware of a major concern on the part of universities about expanding arrangements with colleges. That concern revolves around the granting of credit for academic work over which the university has no direct control and for which it cannot guarantee the quality. Colleges, for their part, can be expected to have a corresponding concern about possible intrusion in their curricular affairs by universities.

However, the Study Team believes that these concerns may lessen with time if the college system undertakes a concerted effort to monitor and ensure standards. Study Team 5 believes that greater clarity around issues of programme standards in the

college system will greatly facilitate the development of arrangements with universities. Standards are a major focus of the work of Study Team 4.

▲ b) Provincial Institute on Academic Awards for Combined College-University Studies

MANDATE AND FUNCTIONS:

This institute would be a provincial institute, with degree-granting authority, dedicated to the provision of degree-completion programmes and polytechnic studies, with instruction taking place at, and being provided by, colleges and universities. The structural forms (sequential and concurrent college-university studies) of its degree-completion and polytechnic programmes would be, for the most part, the same as those described under the provincial coordinating body.

An important feature of this institute is that its board would be responsible for determining its programmes' admission requirements, content, and exit standards. And although colleges and universities would be providing courses to the institute's students and grading their performance in these courses, it would be the institute's degree which the students earned.

It would be necessary for the institute to reach agreement with universities and colleges on the admission of its students to their courses. Provisions for admission of 'special' students might need to be augmented.

As with the provincial coordinating body, the provincial institute would initiate and coordinate analyses related to the need for polytechnic studies.

The institute would produce annually a guide describing not only its programmes, but also college-university arrangements developed by institutions on their own. The existence of the institute would not need to preclude colleges and universities from arranging links on their own, although the institute should probably have a coordinating function in this area.

MEMBERSHIP:

The membership of the institute's board could be similar to that of the provincial coordinating body.

RESOURCES:

The resources required would include those required by the provincial coordinating body, plus an expanded administrative staff and a core of student advisors (counsellors).

DISCUSSION:

An institute with authority to grant degrees is one possible way of avoiding the concern noted in the previous discussion that a coordinating body would have no power to ensure that college-university arrangements were achieved. However, this type of institute — an institute 'without walls' — raises questions about the credibility of an institute degree. Would an institute degree be considered second class?

The Study Team feels that if such an institute were created, the degrees offered would have to be those in common currency. Obscure degrees would simply have too difficult a time in gaining general acceptance. Over time, the institute's degrees would have to prove themselves by producing results that were demonstrably good.

There would be no guarantees, and much of what the institute undertook in its initial years would need to be viewed as experimental (e.g., credit for relevant work experience). However, the institute would be well-positioned to undertake new initiatives; it would not have to concern itself with many of the day-to-day operational concerns of other educational institutions and it would have neither a large physical plant nor large staff complement. It could focus its resources on the development of programmes and admission procedures, and the monitoring of student progress while in school and after.

There are those who argue that a series of local institutes would be preferable to a provincial institute. The Study Team does not agree. For one thing, it would be easier to coordinate arrangements between different institutions across the province with an Ontario institute than with local independent entities. For example, a Mohawk graduate who moved to Ottawa might want to take a degree-completion programme at Carleton and Algonquin. A provincial institute would also be less likely to result in an unnecessarily wide range of programmes in a particular locality; it would not be subject to the same pressures for expansion as a regional institute seeking to establish a name for itself.

More important, a provincial institute would be able to draw upon expertise from across the province to develop programmes, admission procedures and criteria, outcome measures and tracking systems through which the effectiveness of the programmes could be evaluated. It would also provide more opportunity than local bodies for the consistent application of programme standards and admission procedures across the province.

A provincial institute could also ensure local input. For example, it might have regional offices throughout the province, with responsibility for coordinating assessments of local needs, developing programme proposals for consideration by the institute board, and providing academic counselling to potential students.

If programmes offered by the institute, particularly the polytechnic programmes, involved work placements alternating with institutional instruction, the cooperation and participation of local employers and labour representatives would be required to make the programmes viable, and would be indicative of the level of local interest and support. Another opportunity for local input could come through the use of experts in business and industry as part-time instructors, employed by the institute to teach in a college, university or industry setting, with release time provided by employers.

▲ c) Recommendation

Both the coordinating body and the institute raise questions. The major question raised by the provincial coordinating body is:

> Are the barriers to developing effective college-university links too large for a coordinating body without executive authority to overcome?

And with the degree-granting institute:

> Can 'first class' status be attained by a new provincial institute — one with degree-granting authority and utilizing existing college and university teaching services?

These questions are not easily answered. In the consultations, sponsored by the Study Team, with five representative bodies from the college and university sectors, opinion was found to be divided as to which route should be followed at this time. For the most part, representatives from the university sector felt that a provincial

coordinating body was the best option, while representatives from the college sector were often quite positive about the prospects of a provincial institute.

In weighing the various arguments surrounding these two mechanisms, a most compelling one for the Study Team was the momentum which has developed in the past two years in the area of college-university links. Many barriers to achieving effective college-university links appear to be falling. The Study Team believes that most of those which remain can be overcome with some facilitation of collaboration between colleges and universities.

Therefore:

Recommendation 1:

A Provincial Coordinating Body for Combined College-University Studies should be established.

Study Team 5 would expect this initiative to be the subject of an external review and evaluation after three years to ensure that the coordinating body is meeting its objectives.

▲ d) Provision of Degree-Level Programmes by Colleges

Provision of degree-level programmes by colleges represents, in both symbolic and real terms, a major departure from the existing mandate of the college system, and the Study Team has some misgivings about this prospect. However, before describing these concerns, let us first indicate why the Study Team believes serious consideration should be given to college degree programmes.

DISCUSSION:

Over the past several decades, there has been an expansion in the number and types of degree-level programmes offered by Ontario's universities. Many of these programmes are quite occupation-specific. Some examples include programmes in education, urban studies, environmental studies, communications, and computer science.

Often the programmes have been developed in response to emerging occupational fields (e.g., computer science or environmental studies) or in response to significant changes within a traditional occupational field (e.g., education) in terms of knowledge and skill requirements. In addition, a desire by some occupational

groups (e,g. chartered accountants) to raise their status (and earnings) within the occupational hierarchy has, in some instances, led to (or at least contributed to) the requirement that practitioners possess a degree, although not necessarily a degree specifically related to the occupational field.

If this expansionary tendency continues, and Study Team 5 expects it will, there are potentially major consequences for the college sector and the post-secondary system as a whole in Ontario. Increasingly, there may be pressures to develop degree-level programmes in areas which have been mainly the responsibility of the college system. To date, when such pressures have developed and led to degree programmes, it has been the university sector which has assumed responsibility for these programmes, with the college sector in some instances (e.g., physiotherapy) more or less relinquishing its role in providing training in the affected fields.

At some stage, however, the university sector may not be receptive to further expansion of its degree offerings, particularly in fields which have not as yet attained 'professional status' but are attempting to do so. In addition, the university sector may resist major expansions in some of its existing occupation-specific degree programmes (e.g., nursing, in which there are about 9,300 students enroled in the college system). Such programmes, when offered on a relatively small scale, may not be viewed as adversely altering the universities' mandate and image, but major expansions in enrolment might be viewed as intruding on their more traditional roles in education and research.

Depending on how events unfold, the universities may also face physical capacity constraints. For example, the health sector may increasingly require that a higher proportion of nurses (and other health practitioners) acquire degree-level training. This possibility, when combined with the rapidly increasing demand for health care as a result of the aging population and continued advances in medical technologies, could precipitate the need for fairly major expansions in nursing degree programmes which might only be accommodated within the university sector after significant capital expenditures.

While the march of events is such that the Study Team expects degree-level programmes to become a major issue in the college sector at some point in the future, that stage has not yet been reached. If and when the college sector and government give serious consideration to free-standing degree-level programmes

in the college sector (i.e., programmes with no formal involvement of the university sector), attention will need to be paid to several issues in determining the types of technical and 'professional' programmes for which degrees should be offered in the college sector. Issues to be considered should include:

- the possible impacts of college degree programmes on the non-degree activities of colleges;
- the possible impacts of the non-degree activities of colleges on their degree programmes; and
- the 'status' assigned by employers, students, and universities to college degrees;

If the college system became involved in the offering of degree-level programmes, there would be concerns about the potential impacts of these programmes on the non-degree activities of colleges. The main concern might be that the college system was placing itself on a 'slippery slope,' whereby the needs of students not involved in the degree programmes would increasingly be neglected in favour of improving and expanding college degree offerings.

One might observe, for example: a need to bolster library and other resources required to support degree-level programmes, which if not supported by increases in provincial funding could cause colleges to decrease the per-student resources they allocate to non-degree activities; a gradual (or not so gradual) increase in admission standards and programme duration for those programmes moved into the degree category, which might reduce overall accessibility to the college system; and pressures to alter the academic qualifications required of faculty teaching in the degree programmes, leading possibly to a counterproductive faculty hierarchy within the college system.

With respect to the impacts of non-degree activities on college degree programmes, the main concern might be that the degree programmes would be unable to flourish in an environment heavily weighted toward non-degree training. Skolnik notes that "it was not the transfer function that undermined the non-degree functions (of American junior colleges) by making the latter second class activities; but (their) non-degree functions (e.g., lower level occupational training, community service and remediation) which undermined the transfer function by contributing to an institutional climate which did not facilitate higher level academic work." (p.5)

There would also be concerns about the status or prestige of the degrees offered by the college system. Almost any new institution, including new universities, offering degree programmes initially experiences unfavourable comparisons with established institutions, warranted or not. In the case of the college system, however, it may be very difficult and take considerable time for its degrees to achieve anything resembling parity of esteem with university degrees. The weight of tradition, particularly in Ontario where the offering of degree programmes has been highly regulated, is such that students and their parents, employers, and universities are likely to view college degree programmes with considerable scepticism.

Such scepticism is not inconsequential if it leads to students shunning college degree programmes in favour of university programmes, particularly if, as a result, needed 'advanced' training in certain programme/occupational areas is forgone. Nor is it inconsequential if it results in persistent labour market discrimination against college degree holders or in unduly limited opportunities for the college degree holders to pursue further studies at a university.

The preceding discussion has purposely sketched some potential problem areas and concerns related to colleges moving into the provision of more advanced training through the offering of degree programmes. There are obviously counter-arguments to many of the concerns raised and benefits which could accrue to individuals and society at large if the college system expanded its range of offerings to include selected degree programmes.

The Study Team does want to stress that college degree programmes would represent a major change in the mandate of the colleges. This change, if not properly managed, could lead to some undesirable or unintended outcomes with respect not only to other key components of the sector's current mandate, but also to the degree programmes themselves and the supply of highly trained labour.

How then should Ontario proceed with respect to the issue of colleges moving into more advanced training through the provision of degree programmes? The Study Team believes that **the issue is one which is on-going, with the dimensions of the issue changing over time, and one which necessarily involves the universities, the colleges, and the government.**

Therefore:

Recommendation 2:

The Provincial Coordinating Body for Combined College-University Studies should also be given the responsibility of assessing, in a programme-specific context, the merits of establishing degree-level college programmes in response to pressures for more advanced training.

Study Team 5 noted in its description of the mandate and functions of the provincial coordinating body (in part (a) of this section) that this body should consider a range of structural forms involving college-university programme links, such as degree-completion programmes (i.e., college training followed by degree-completion at a university), and joint college-university programmes (i.e., concurrent college-university studies), with a university awarding a degree.

With Recommendation 2, the Study Team is expanding the role of the coordinating body to include assessment, on a programme-specific basis, of the relative merits of establishing degree programmes in the college sector. In this context, the provincial coordinating body should give careful consideration to the impacts on college and university mandates and to the likely response of employers and students. It should pay particular attention to those fields for which there are not currently degree programmes in the university sector and to 'professional' fields in which both the colleges and universities offer programmes (e.g., nursing).

In its annual report to the Minister, the coordinating body should describe, for each programme area examined, the nature of the pressures for more advanced training, and the options, with their strengths and weaknesses, for responding to the pressures. These descriptions should be provided not only in programme areas in which the coordinating body believes colleges should provide degree programmes, but also in programme areas in which it has undertaken to develop links between colleges and universities, as per Recommendation 1.

The Study Team wishes to stress that Recommendation 2 is designed to provide the post-secondary system in Ontario with an on-going forum in which the major stakeholders of the system can assess the full range of possible responses to pressures for more advanced training. This recommendation also represents an attempt to place the issue of college degree programmes in more concrete terms. It could allow, for example, colleges interested in offering degree-level programmes to bring proposals to the provincial coordinating body for appraisal. It is the feeling of this

Study Team that discussions of whether the college sector should offer degree programmes have, thus far, been quite abstract in nature and have suffered from a lack of specificity.

Further, it should be emphasized that Recommendation 2 does not, in and of itself, allow for college programmes to be offered at the degree-level at this time. If and when the proposed on-going assessments lead to the conclusion that colleges should provide selected programmes at the degree level, legislation would need to be developed to provide the necessary degree-granting authority.

Should it develop that such legislation is considered, it is the view of Study Team 5 that the authority to grant degrees should be conferred on a provincial body rather than on individual colleges. The Study Team bases its conclusion on three major factors: the danger in creating a two-tier college sector in which some colleges are degree-granting institutions while others are not; the need to protect the integrity of colleges as colleges, and to preserve their unique mandate; and the importance of quality control on a province-wide basis. In addition, as pointed out in the discussion of the provincial institute, the degrees should be ones which are in common currency.

Related Issues and Recommendations

▲ a) College Credentials

Study Team 5 has some concerns about the credentials currently being offered by the colleges. At present, colleges provide certificates for the successful completion of one-year programmes; diplomas for the successful completion of two-year and three-year programmes; and no common credential exists for those students who successfully complete post-diploma studies at the colleges. The lack of distinction in the diplomas provided to two-year and three-year graduates confuses employers and is unfair to the students. Similar problems arise because of a lack of a common credential for those completing post-diploma studies.

Therefore:

Recommendation 3

A: The college system should undertake a review of its credential structure. This review should aim to develop a credential structure for the system in which credential titles clearly denote significant differences in the nature and level of curricula.

B: In addition, the college system should explore the feasibility and merits of developing a common format for a descriptive record of the courses taken by a student and the student's performance in these courses. Such a record should be available to students wanting to provide information to employers and other educational institutions.

▲ b) General Accessibility to University for Secondary School Graduates

Thus far, the discussion on accessibility to university has mainly concentrated on students who initially (and presumably willingly) enter college post-secondary programmes of an applied and vocational nature, but then at some stage desire to embark upon degree-level studies. This subsection deals with two other types of students: those secondary school graduates who are qualified to enter first year of a university degree programme, but do not gain admission; and those secondary school graduates who are not qualified to enter first year of a university programme, but have a strong desire to do so. Do colleges have a role to play in assisting these types of students in meeting their educational objectives?

QUALIFIED HIGH SCHOOL GRADUATES

The question has been asked whether Ontario's colleges should have university transfer programmes for secondary school graduates who are qualified to attend university, but who due to space shortages or limitations on access due to geographic distance cannot enrol.

Such transfer programmes, if provided by the colleges, might be two years in duration, of the general arts and science nature, and would be composed of university equivalent courses. Following successful completion, students would be able to enter directly into the third year of a comparable programme at a university.

The Study Team has not seen evidence that there is a significant, widespread problem of space shortages or geographical limitations on access which would require this kind of remedial action. It has also been pointed out that the cost of establishing transfer programmes in Ontario colleges could be as large as expanding the capacity at universities.

Therefore, the Study Team does not support the introduction of transfer programmes in Ontario colleges.

Recommendation 4:

Transfer programmes, which provide courses equivalent to those offered in the first one or two years of university arts and science programmes, should not become part of the colleges' programme offerings.

UNQUALIFIED HIGH SCHOOL GRADUATES

The Study Team also looked at the issue of accessibility to university for high school graduates who do not have the necessary credits or grades for admission to first-year university. Currently, some colleges have General Arts and Science (GAS) programmes designed for this purpose. GAS programmes are also used to prepare students for college vocational programmes and for training 'generalists.'

There are alternative routes for students to obtain university qualifications. Universities have provisions for mature students who do not meet the normal university entrance requirements, and in some urban centres in Ontario, there are 'adult' high schools. However, these alternatives may not suit the needs of some students. For example, recent high school graduates, those 20 and younger, may be reluctant to return to the traditional high school. In these circumstances, it may be

that a college environment would be more appropriate for obtaining qualifications necessary for university admission — it would represent a new and different environment, yet one in which students of similar age were prevalent.

And importantly, locating university preparatory programmes in the colleges would provide these students with a first-hand opportunity to assess the trade, vocational, and post-secondary programmes offered at colleges, and expand their views of the options open to them. In short, locating a university preparatory programme in a college should lead to a modest increase in participation in post-secondary education, at both the college and university level.

Study Team 5 proposes that there be system-wide recognition of university-preparatory programmes at the college level, and that the college and university sectors develop a system-wide transfer agreement so that students will be treated in a consistent and equitable way across the province. Study Team 5 has not attempted to determine how university-qualifying programmes might be structured; a variety of alternatives with respect to programme characteristics should be explored.

Recommendation 5:

Through the Provincial Coordinating Body, the college and university sectors should develop a system-wide transfer agreement with respect to college-based university-preparatory programmes for high school graduates seeking the qualifications necessary to enter first-year university.

Appendix 1: Members of Study Team 5

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Education,
City of York, Board of Education

Jim Turk,
Director of Education,
Ontario Federation of Labour

Diane Chevalier,
Faculty,
Algonquin College

Felicity Corelli,
Research Consultant

Susan Davey,
Principal,
Bickford Park High School

Terence Grier,
President,
Ryerson Polytechnical Institute

Bert Martin,
President,
St. Clair College

Vicki Milligan,
Office Administration,
Seneca College

Desmond Morton,
Principal, Erindale College,
University of Toronto

Starr Olsen,
Executive Officer of Study Team 5, and
Consultant, Professional Development,
Humber College

George Pedersen,
President,
University of Western Ontario

Peter Stokes,
Analyst,
Commercial Services Unit,
Ministry of Colleges & Universities

Scott Turner,
Dean School of Visual Arts,
Sheridan College

Appendix 2: Listing of Study Team 5 Background Papers

Summary of Submissions Received in Response to "An Invitation to Participate"
Felicity Corelli

College to University—An Analysis of Transfer Credit Policy and Practice
John Dennison

College-University Student Transfer Arrangements Existing in Ontario
Robert Alexander Marshall

Consultations on College-University Linkages
Craig McFadyen

The Relationship Between Schools and Colleges
Jo Oppenheimer

How Ontario's College System Might Respond to Pressures for the Provision of More Advanced Training
Michael Skolnik

Skilled and Educated: A Solution to Ontario's Urgent Need for More Polytechnic Programs
Stuart Smith

College Transfer Revisited: A Working Paper
Peter Stokes

Appendix 3: "Invitation to Participate" Submissions

Name	Title	
David Sterling	President	SAC - Lambton College
Dora Dempster	Chair	Committee on Learning Resources
A. D. Arthur	Supervisor	CFB Borden Board of Education
Raymonde Hanson	V. P. Academic	Algonquin College
Stormont, Dundas & Glengarry		County Board of Education
E. D. Anderson	Director of Education	Middlesex County Board of Education
Evelyn Dodds	Chair	The Lakehead Board of Education
Andrew Winter	President	SAC — Sheridan College
Allen Wells	Director of Education	The Lambton County Board of Education
D. Burford	Principal	Michipicoten High School
E. C. Mallard	Superintendent of Education	Norfolk Board of Education
B. D. Moore	President	Fanshawe College
H. N. Atkins	Dean of Technology Division	Seneca College
R. A. Dodds	Director of Education	Board of Education for East York
Bill LeMay	Guidance Coordinator	Nipigon-Red Rock District High School
Michael McKenna	Director of Education	Grey Bruce County Board of Education
P. L. Hicknell	Superintendent of Education	Secondary Schools, Waterloo Region Roman Catholic Separate School Board
W. A. Brown	Director of Education	Bruce-Grey County Roman Catholic Separate School Board
Marilyn Stratton-Zimmer	Chair, College Committee on Student Affairs	Algonquin College
Bruce Wells	Executive Director	Ontario Association of Certified Engineering Technicians and Technologists
T. F. McGory	Superintendent of Schools	Timiskaming Board of Education
J. L. Wooden	Principal	Central Huron Secondary School

Jack MacKinnon	Provincial Director	Federation of Catholic Parent-Teachers Association of Ontario
Elizabeth Witmer	Chair	Waterloo County Board of Education
Mary Jane Veinott	Records Officer	Local 656 OPSEU
Robert Esch	Director	The Espanola Board of Education
Trevor Walker	Coordinator	Carleton Roman Catholic School Board
Margaret Landstrom	President	OCUCE
Robert Charlebois	Director	Algonquin Management Centre
Maureen Harte	Program Advisor, Guidance & Counselling	The Board of Education for the City of Etobicoke
Joseph Virdiramo	Director of Education	The Nipigon-Red Rock Board of Education
John Schievink	Guidance Consultant	Durham Board of Education
D. M. Disney	Director of Education	The Victoria County Board of Education
Jack Little	Director of Education	The Board of Education for the City of London
Bill Steadman	Chair	The Lambton County Board of Education
Betty Anderson		Beaver Brae Secondary School
D. G. Rikley	Director of Education	Renfrew County Board of Education
		Collège catholique Samuel Genest
		Pain Court Secondary School
Monique Martel	President	The Lambton County Board of Education
Brian Todd	Superintendent of Instruction	The Northumberland & Newcastle Board of Education
Charlemagne Lamarche	President	Stormont, Dundas & Glengarry
County Board of Education		
Earl Lozon	Director of Education	Catholic Education in Kent County
P. D. Meany	Chair	The Dufferin-Peel Roman Catholic Separate School Board
Lyle MacLennan	Director of Education	The Carleton Board of Education
David Drake	Associate Dean, Academic	Centennial College
Elizabeth Sime		

F. J. Finlay	Superintendent of Education	The Durham Region Roman Catholic Separate School Board
Allan McLeod	Associate Superintendent of Program	Scarborough Board of Education
Graeme Barrett	Superintendent of Instructional Services	J. W. Singleton Education Centre
R. J. O'Brien	Director of Education	The Windsor Roman Catholic Separate School Board
Arthur Duboyce	Superintendent of Schools (Student Services)	Perth County Board of Education
Garth Jackson	Vice-President, Academic	George Brown College
Sandra Thompson	President	Ontario School Counsellors' Association
Pauline Laing	Director of Education	The Durham Board of Education
Bonnie Kehoe	Chair of the Board	The Ottawa Roman Catholic Separate School Board
G. M. Smith	Guidance Department	Central Huron Secondary School
Patricia Carter	Vice-President, Academic	Conestoga College
Ruth Lafarga	President	Ontario Public School Boards' Association
John Bates	Director of Education	Frontenac County Board of Education